

DEPARTMENT OF ENERGY	LESSON PLAN
	<p>Course: Radiological Control Technician</p> <p>Unit: Site Academics</p> <p>Lesson: 2.02 Communication Systems</p>
<p>Learning Objectives:</p> <p>2.02.01 Explain the importance of good communication.</p> <p>2.02.02 Identify two methods of communication and be able to determine different types of each.</p> <p>2.02.03 Describe different types of communication systems.</p> <p>2.02.04 Describe the FCC and DOE rules and regulations regarding proper use of communication systems.</p> <p>2.02.05 Describe general attributes of good communications.</p> <p>2.02.06 Explain the importance of knowing how to contact key personnel.</p> <p>☞ 2.02.07 Identify the communication systems available at your site and methods available to contact key personnel.</p> <p>☞ 2.02.08 Describe the emergency communication systems available at your site.</p>	
References:	
<p>Instructional Aides:</p> <p>Overhead projector/screen, chalkboard/whiteboard</p> <p>Recommended - radio, telephone, pager, warning alarms, phonetic alphabet handout</p>	

I. LESSON INTRODUCTION**A. Self Introduction**

1. Name
2. Phone Number
3. Background

B. Motivation**C. Lesson Overview**

1. Importance of communication
2. Methods of communication
3. Communication systems
4. FCC and DOE rules and regulations
5. General attributes of good communications
6. Contact of key personnel
7. Site communication systems
8. Site emergency communications

D. Introduce objectives

O.H.: Objectives

II. LESSON OUTLINE**A. IMPORTANCE OF COMMUNICATIONS**

Objective 2.02.01

1. Clear
2. Understood
3. Received

B. TWO METHODS OF COMMUNICATION

Objective 2.02.02

1. Verbal

Ask the student to name the two ways to communicate and examples.

2. Nonverbal

C. COMMUNICATION SYSTEMS

Objective 2.02.03

2.02: COMMUNICATION SYSTEMS

LESSON OUTLINE

INSTRUCTOR'S NOTES

1. Public Address

Ask students to name communication systems available in everyday use at home and work.

2. Telephones

3. Two-way Radios

4. Pagers

5. Computer Mail Systems

6. Computer Bulletin Boards

D. FCC AND DOE RULES AND REGULATIONS

Objective 2.02.04

1. By FCC and DOE rules and regulations, it is illegal to:

Stress importance of complying with these restrictions.

- a. Use profane, indecent, or obscene language.
- b. Willfully damage or permit radio equipment damage.
- c. Cause malicious interference with any radio communications.
- d. Intercept and use or publish the contents of any radio message without the permission of the proper authorities.
- e. Make unnecessary or unidentified transmissions.
- f. Transmit without first making sure that the transmission will not cause harmful interference.
- g. Make any adjustments, repairs, or alterations to a radio transmitter without licensing by the FCC or acceptable equivalent.
- h. Transmit a call sign, letter, or numeral which has not been assigned to your station.
- i. Rebroadcast another transmission (ie radio station music).

E. GENERAL ATTRIBUTES OF GOOD COMMUNICATIONS.

Objective 2.02.05

1. Minimize the use of abbreviations and acronyms.

Stress importance of good habits and technique.

2. Make all oral instructions clear and concise.

3. Ensure the identity of the person(s) is/are clearly understood.

4. Use clear, precise terminology.

See Table 1 - "Phonetic Alphabet and Numbers"

5. Repeat back messages, either paraphrased or verbatim.

6. Speak distinctly and deliberately.

7. Acknowledge all communications.

F. CONTACTING KEY PERSONNEL

Objective 2.02.06

1. Getting knowledgeable people to locations is necessary for routine, emergency, and non-routine circumstances.

2. Important for the protection of personnel, equipment and to prevent radiological releases.

3. RCTs should be aware of communication equipment.

G. SITE COMMUNICATION SYSTEMS

Objective 2.02.07

(Insert site specific information here.)

H. EMERGENCY COMMUNICATION SYSTEMS

Objective 2.02.08

(Insert site specific information here.)

III. SUMMARY

A. Review major topics

1. Importance of communication
2. Methods of communication
3. Communication systems
4. FCC and DOE rules and regulations
5. General attributes of good communications
6. Contact of key personnel
7. Site communication systems
8. Site emergency communications

B. Review learning objectives

IV. EVALUATION

Evaluation shall consist of a written examination comprised of multiple choice, fill-in the blank, matching and/or short answer questions. 80% shall be the minimum passing criteria for examinations.